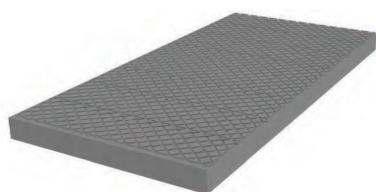




la scelta giusta
per grandi progetti.

SCHEDA TECNICA



LG 150 BOARD



SINTERED POLYSTYRENE FOAM AND GRAPHITE EMBOSSED INSULATION BOARD

PRODUCT

Sintered Polystyrene Foam and graphite embossed insulation board (EPS) for thermal insulation in construction. Traction strength ≥ 150 kPa, Thermal conductivity (λ): 0,031 W/mK.

CARATTERISTICS

Light, cheap, insulating, easier in the laying, breathable, non-toxic, impact-resistant, suitable for any type of thermal insulation.

Thicknesses: 40, 50, 60, 80, 100, 120 mm.

The EPS is not a fertile ground for the development of bacteria, fungi or other microorganisms.

Production waste can be recycled as long as not mixed with other materials or substances.

APPLICATION FIELDS

Internal and external coats, crawlspaces, attic floors, undertile, attics, false ceilings, cold storage insulation.

SUBSTRATES

Brick masonries, thermo-bricks, mixed or of stone, concrete, old and new plaster, tuff.

PACKAGING

The LG 150 boards are supplied in polyethylene packaging.

Standard board dimensions: 1000 x 500 mm

STORAGE

Storable for at least 12 months in its original packaging, protect from moisture and UV rays.

ITEM SPECIFICATIONS

The internal/external insulation system will be realized through the laying of expanded polystyrene board with added graphite such as LG 150 Board by Edilcol Italia which has a tensile strength ≥ 135 kPa and a thermal conductivity (λ) = 0,031 W/m·K.

PREPARATION OF THE SUBSTRATE

- Check that the substrates are clean, resistant, rough and perfectly seasoned.
- Remove the detached parts without leaving any residues. Treat with a suitable consolidating or remove entirely the crumbly surfaces or tending to crumbling.

WORKING PROCESS

- The fixing and the levelling of the boards will be carried out with the cement-based adhesive mortar CR 510.
- If the substrate is perfectly planar, apply with a notched trowel on the entire surface of the board.
- If the substrate is not perfectly planar and has irregularities lower than one centimeter in height, apply with a trowel in order to form some width strips of few centimeters in parallel to the board sides and at the center of thickness at points with a diameter of about 5-10 cm.
- Place the boards from bottom to top, carefully beating them for a perfect adhesion, using when necessary, a mechanical fixing with appropriate bolts after about 24 hours from the laying of boards.
- Do not apply the product on the edges of the insulation boards, possible cause of the formation of thermal bridges.
- In correspondence of the edges, the boards must be alternated to absorb the tensions.

- After at least 48 hours after the application of the boards, realize the reinforcement layer applying a first coat of CR 510 on which drown the fibreglass mesh HT 150, crushing it with a smooth trowel on the fresh layer of the mixing taking care of overlay the mesh for 10 cm.
- At a distance of 1 hour, cover with a second coat of levelling grout.
- Realize the finishing when the smoothing grout will be well hardened and cured.

RECOMMENDATIONS

During the laying protect the boards from rain.

Do not use LG 150 Boards to realize wainscots. In this case use LZ 200 Boards. Do not use CR 510 for the bonding of boards on metal surfaces or on substrates subject to strong movements.

The laying of the boards must not be carried out at temperatures below + 5 ° C or above + 35 ° C.

Although the details contained in this product report correspond to the best of our current experience, all the above information must be confirmed after practical applications. Anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of product. The values given in the technical data derived from tests conducted in laboratory, in a controlled environment, so they may be greatly modified by the conditions of installation.

DATI TECNICI

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TECHNICAL FEATURES

	Value	Rule		Tolerance
Length	1000 mm	EN 822	L2	± 2 mm
Width	500 mm	EN 822	W2	± 2 mm
Thickness	40, 50, 60, 80, 100, 120 mm	EN 823	T1	± 1 mm
Orthogonality		EN 824	S2	± 2/1000 mm
Planarity		EN 825	P3	± 3 mm

MECHANICAL FEATURES

	UNI EN 13163 Code	Reference rule	Value
Tensile strength	TR	EN 1607	≥ 135 kPa
Flexural strength	BS	EN 12089	≥ 135 kPa
Dimensional stability	DS (N)	EN 1603	± 0,2%
Shear strength	τ	EN 13163	≥ 65 kPa

THERMAL FEATURES

Thermal Conductivity λ_D	0,031 W/mK (UNI EN 12667)					
	4 cm	5 cm	6 cm	8 cm	10 cm	12 cm
Thermal resistance R_D (sqK/W) (UNI EN 12667)	1,25	1,60	1,90	2,55	3,20	3,85
Reaction to fire	EUROCLASS E (EN 13501-1)					
Specific heat	$c = 1350$ J/kg K (EN 10456)					
Coefficient of linear thermal expansion	65×10^{-6} K ⁻¹ (EN 10456)					
Temperature of use	≤ 80°C					